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10/537,135	06/02/2005	Karen I Trovato	US020476US	1168

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
P.O. BOX 3001  
BRIARCLIFF MANOR, NY 10510

EXAMINER
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LEE, Y YOUNG

ART UNIT	PAPER NUMBER
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2621

MAIL DATE	DELIVERY MODE
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05/17/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



## **DETAILED ACTION**

### ***Drawings***

1. The drawings were received on 4/26/10. These drawings are acceptable.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-18, 21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gutta et al (WO 02/071315) in view of Liu (6,553,281).

Gutta et al, in Figures 1 and 2, discloses an automatic positioning of display depending upon the viewer's location that is the same apparatus as specified in claims 1-18, 21, and 22 of the present invention, comprising a device 24; an arm assembly 36 having a first end 32 connected to a fixed support 28 and a second end 40 connected to the device 24, the arm assembly having actuating means 36 for positioning the device 24; a sensor 48 configured to detect and provide information about a subject 10 within a sensing range of the sensor 48, the subject 10 having eyes, and the sensor 48 being calibrated with a location of the subject 10 corresponding to a position and orientation; and a processor 52 configured to process the information, the processor 52 further being configured to determine a current location (e.g. Fig. 1) of the subject 10 in response to the processed information, determine a first location corresponding to an optimal position (e.g. X-axis) based on the current location of the subject 10, for use of the device 24 by the subject 10, wherein a top of the device 24 is aligned with the

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subject, and control the actuating means 36 to move the arm assembly to position the device 24 at a second location relative to the first location within a configuration space of allowable device positions (e.g. Fig. 1, dotted positions) and taking into account movement restraints (e.g. 2%) and nearby obstacles (e.g. second person), the second location further corresponding to an achievable position within the configuration space nearest the optimal position (e.g. Fig. 2).

Although Gutta et al discloses using common image recognition technique to calibrate the sensor and align the device corresponding to the position and orientation of the subject, it is noted Gutta et al differs from the present invention in that it fails to particular disclose details image recognition software as specified in claims 1-18, 21, and 22 of the present invention. Liu however, in Figures 1 and 4, teaches the concept of such well known calibration technique wherein the fixation point is the midpoint of the eyes.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, having both the references of Gutta et al and Liu before him/her, to exploit the well known detection technique as taught by Liu in the sensor of Gutta et al in order to achieve highly precise monitoring of the subject as a reference point for accurate positioning of the device.

With respect to claims 2-18, 21, and 22, Gutta et al also discloses the first location and the second location are the same (e.g. no adjustment); the processor determines a path of the movement of the arm assembly to the second location using inverse kinematics (e.g. Fig. 2); wherein the processor determines a path of the movement of the arm assembly to the second location using path planning (e.g. dotted lines and arrows in Fig. 2); wherein the fixed support is a single a pole 32; wherein the device is a lens and thyroid protector (e.g. video projection

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screen); wherein the second location is chosen from two or more predetermined positions (e.g. Fig. 2); wherein the processor causes the actuating means of the arm assembly to move the device to a rest position if the subject is not detected (e.g. default position); a second sensor, the second sensor being configured to detect the presence of a person who is not the subject and being operatively coupled to the arm assembly to prevent movement of the arm and the device if any said person who is not the subject is detected (e.g. face recognition); wherein the first location is determined based on optimal use of the device by the subject (e.g. pre-programmed adjustments); and wherein the first location is determined based on optimal viewing by the subject through the device (e.g. facing the subject).

4. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gutta et al in view of Liu and further in view of Jeong (6348,928) for the same reasons as set forth in Section 6 of the last office action, dated 1/26/10.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Y. Lee whose telephone number is (571) 272-7334. The examiner can normally be reached on (571) 272-7334.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Young Lee/  
Primary Examiner  
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